Sheriff's Mobile Data Computer (MDC) System

In 1999, Captain Harry VanVliet IV approached Sheriff Rich Bockelmann with a technology project that some thought would be difficult to achieve in Ulster County. The project's goal was to install computers into sheriff patrol units which could connect wirelessly to law enforcement computer database systems. This capability would provide deputies with instant information. The project idea came from a televised law enforcement program in which police from a similar-size county checked warrants on an in-car computer. After receiving the Sheriff's approval, Captain VanVliet worked on the development and implementation of the project by creating partnerships which included Dobson Cellular Systems, AirLink Communications, Annese and Associates, New York State Police Network Support at Albany, Town of Poughkeepsie Police Sgt. Ed Kolor, Chautauqua County Sheriff's Sgt. Vincent Gerace and Ulster County Information Services Director Lee Taylor and his Assistant Director Chris Fiore.

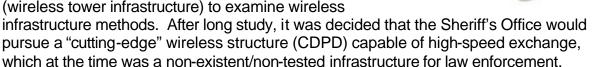Recognizing a funding source would be a major part of the success of this program, the Sheriff sought financial assistance from COPS More, a U.S. Department of Justice Program. The U.S.D.O.J. Office of Community Oriented Policing Services (COPS) awards technology grants to law enforcement agencies with the condition that the technology purchased under the grant will be used to effectively re-deploy full-time equivalent police officers back into the communities they serve. The Sheriff's Mobile Data Computer project strived to accomplish this requirement by providing deputies with a powerful and effective tool which would be used to complete a myriad of tasks in their patrol unit while in the neighborhoods they were assigned to patrol, as opposed to returning to a distant station to pen paperwork.

On April 1, 1999, subsequent to a comprehensive application process, an award was granted to the Sheriff in the amount of $113,349 in federal share money, with a required Ulster County commitment of only $37,784. This total of **$151,133.00** provided the necessary funding to move the project forward.

The following 18 months involved extensive planning and examination of similar systems, including interviews with the administrators of those systems. Those interviewed included Town of Poughkeepsie Police, San Diego (California) Police, Chautauqua County (NY) Sheriff, and Los Angeles (California) Police. In addition, a network of key technology experts was formed, which included Annese Associates (communication software), AirLink Communications (wireless modems) and Dobson Cellular (wireless tower infrastructure) to examine wireless infrastructure methods. After long study, it was decided that the Sheriff's Office would pursue a "cutting-edge" wireless structure (CDPD) capable of high-speed exchange, which at the time was a non-existent/non-tested infrastructure for law enforcement.

Finally on February of 2001, after careful planning and equipment installation, Sheriff Bockelmann "flipped the switch" on Ulster County's first law enforcement wireless Mobile Data Computer system. It was a success, with the test patrol unit transmitting and receiving an answer within seconds.

The system included 9 ruggedized laptops with an Intel Pentium II 300 MHz processor, a spill resistant backlit rubber keyboard and touch LCD screens. The connection between the patrol unit's computer and the sheriff's office computer network was achieved by using a vehicle computer modem (photo left) capable of transmitting data by radio wave at 19.2 Kbps, which was twice as fast as the traditional radio transmitters used by other mobile data agencies.

In addition, while designing the system, the project was planned for the future by allocating a portion of initial federal funding toward a computer server network capable of growth and user expansion. This server plan allows other municipal police agencies in Ulster County to "plug in" to the Sheriff's MDC system at a substantially lower cost.

Sheriff's Mobile Data Computer Enhancement

On June 21, 2002, after a second application submission, Sheriff Bockelmann announced that the U.S. Department of Justice, Office of Community Oriented Policing, awarded the Sheriff's Office an MDC system enhancement grant in the amount of $62,206.00 in federal share money, with a required county commitment of $20,735. This enhancement grant program totaled **$82,701**, and was welcome news to system users. The MDC project continued under the leadership of Captain Harry VanVliet, who worked on the development and deployment of the project since April 1999. To date, the Sheriff successfully secured a total of $175,315 from the Federal government for MDC technology. This amounts to a grand total of **$234,074** invested into the high-tech system, only $58,519 of which were county funds.

Using this 2002 federal grant award, Captain VanVliet enhanced the MDC system in the following way:

1) Installed Panasonic Toughbook CF-28 laptops to the remainder of the marked patrol fleet, including K9 units and patrol boats;

2) Provided portable "aircard" CDPD modems to existing supervisor and detective laptops which enabled their access to the MDC system while in the field/crime scene;

3) Expanded information sharing by completing server enhancements, which will allowed other interested law enforcement agencies to *"plug-in"* to the Sheriff's system. This assists local agencies in affordability by allowing access to a data network already operational, which would otherwise be costly to install.

By providing wireless computers in Sheriff's Patrol Units, the following goals are accomplished:

Deputies are provided Rapid Access to critical information (NCIC/DCJS);
Deputy safety is increased (with immediate field access to databases)
Effectiveness and productivity is increased;
Deputies are able to make better and informed decisions in the field;
The workload of the Communications deputy is decreased;
Silent and secure communications among mobiles is enabled.

Advantages of the Mobile Data System include:
A system that can not be monitored by a scanner;
Can prioritize messaging based on urgency
Automatically notifies other logged-on laptops of emergencies.
Provides a method of *"next-shift"* briefing of critical information;

Information that can be immediately accessed by the MDC includes:
DMV files including Registration, Licenses, (In & Out of State);
DCJS Database of Wanted/Missing persons, Articles, Guns and Vehicles;
FBI's National Crime Information Center (NCIC) 2000 Database;
Sheriff's accredited Rules and Procedures Manual;
NYS Laws (searchable) including Penal, CPL, Family, and V &T Laws;
Law enforcement forms including legal court forms;
Sheriff's Police Records Management system.